

Table 1.6. Splint test for gases

<p>Some gases can be identified using a splint test. A splint is a thin, flat piece of wood that easily catches on fire. Hydrogen (H₂), oxygen (O₂), nitrogen (N₂), water vapor (H₂O) and air have different reactions to a splint test.</p>	
Hydrogen (H ₂)	When a burning splint is introduced to a sample of pure hydrogen gas, it will burn with a popping sound.
Oxygen (O ₂)	When a smoldering splint is introduced to a sample of pure oxygen gas, the splint will reignite.
Nitrogen (N ₂)	When a burning splint is introduced to a sample of pure nitrogen gas, it will be extinguished.
Water Vapor (H ₂ O)	When a burning splint is introduced to a sample of pure water vapor, it will be extinguished.
Air ~ 79% Nitrogen, (N ₂) ~ 21% Oxygen, (O ₂)	When a burning splint is introduced to air, it will continue to burn.